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(54) Title: OLEFIN POLYMERISATION PROCESS

(57) Abstract: A process for the homopolymerisation of ethylene or the copolymerisation of ethylene and (α -olefins in a polymerisation reactor, said process carried out in the presence of a catalyst system comprising (a) a polymerisation catalyst and (b) an ionic activator is characterised in that an organometallic compound of a Group IIIB metal having at least one unit of formula: $M\zeta O\zeta R$ or $M\zeta O\zeta M$ where M is the Group IIIB metal and R is a hydrocarbyl group is added to the reactor. Preferred organometallic compounds include aluminoxanes and the process results in improved poison scavenging as well as advantages in activity profiles, catalyst activity and product characteristics. The process is particularly suitable for use with supported metallocene catalyst systems in the slurry or gas phase.

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